



UNITED STATES PATENT AND TRADEMARK OFFICE

ac

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,085	11/14/2000	Bruce S. Williamson	KCX-224 (15065)	8779

7590 02/13/2004

Stephen E Bondura Esquire
Dority & Manning P A
Post Office Box 1449
Greenville, SC 29602-1449

EXAMINER

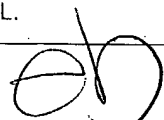
CINTINS, IVARS C

ART UNIT PAPER NUMBER

1724

DATE MAILED: 02/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/712,085	WILLIAMSON ET AL.	
	Examiner	Art Unit	
Ivars C. Cintins	1724		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1724

In view of Applicant's remarks presented on pages 8 and 9 of the response filed July 18, 2003, the new matter rejection contained in the Office action dated May 21, 2003 is hereby withdrawn.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-8, 11, 13, 14, 17-20, 22, 24, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over May et al. (U.S. Patent No. 3,209,916) in view of Patrick et al. (U.S. Patent No. 5,762,797). May et al. discloses a filtration device comprising an unfiltered inlet surface (12), a plurality of spirally wound filter media layers (see col. 2, lines 5, 33, 42 and 51) which media completely overlap and contact adjacent layers such that the edges of these layers are aligned in a common plane (see Figs. 1 and 2). Accordingly, this primary reference discloses the claimed invention with the exception of the recited perforated core. Patrick et al. discloses a similar filtration device having a plurality of filtration layers, and further teaches the use of a perforated core (i.e. element 12). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the filtration device of May et al. with a perforated core of the type disclosed by Patrick et al., in order to facilitate the distribution of liquid undergoing treatment in this primary reference device.

Claims 1, 2, 5-8, 11-14, 17-20, 22-24 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patrick et al. in view of May et al. Patrick et al. discloses a filtration

Art Unit: 1724

device comprising an unfiltered inlet surface, a plurality of concentric filter media layers which completely overlap and contact adjacent layers such that the edges of these layers are aligned in a common plane (see Fig. 2), and a perforated core. Accordingly, this primary reference discloses the claimed invention with the exception of the recited spirally wound layers. May et al. discloses constructing plural concentric filtration layers in the recited manner; and it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the concentric filtration layers of the primary reference device in the manner suggested by May et al., in order to ensure that these filtration layers do not separate from one another (see col. 2, lines 5-7 of May et al.).

Claims 9, 10, 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patrick et al. in view of May et al. as applied above, and further in view of Hiasa et al. (U.S. Patent No. 5,607,595). The modified primary reference discloses the claimed invention with the exception of the recited activated carbon layer. Hiasa et al. teaches filtering water through a sheet of activated carbon fibers (see col. 6, lines 14-15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the filtration device of the modified primary reference with a layer of activated carbon, as suggested by Hiasa et al., in order to provide the water purification functions associated with activated carbon for the filtration device of this modified primary reference. Such a modification is deemed to be especially obvious in view of the disclosure by Patrick et al. (see col. 5, line 33) that the filtration device of this primary reference can include activated carbon.

Claims 3, 4, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patrick et al., May et al. and Hiasa et al. as applied above, and further in view of Pall et al. (U.S.

Art Unit: 1724

Patent No. 4,523,995). The modified primary reference discloses the claimed invention with the exception of the recited charge-modified media. Pall et al. discloses a charge modified filtration media of the type recited, and teaches (see col. 2, lines 67-68) that this media has enhanced particulate removal efficiencies. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the filter of the modified primary reference with the charge modified filtration media of Pall et al., in order to obtain the advantages disclosed by this secondary reference for the filter of this modified primary reference.


Applicant's arguments filed July 18, 2003 have been noted and carefully considered, but no longer appear to be relevant in view of the new grounds of rejection.

Dennis (U.S. Patent No. 3,262,578) discloses a similar multi-layered filtration material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is (571) 272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Blaine Copenheaver, can be reached at (571) 272-1156.

The centralized facsimile number for the USPTO is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
February 6, 2004